

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: JONES POND	Lake Area (ha): 8.09
Town: MIDDLETON	Maximum depth (m): 3.1
County: Strafford	Mean depth (m): 1.6
River Basin: Coastal	Volume (m ³): 128500
Latitude: 43°30'44" N	Relative depth: 1.0
Longitude: 71°06'40" W	Shore configuration: ---
Elevation (ft): 1010	Areal water load (m/yr): 5.27
Shore length (m): 900	Flushing rate (yr ⁻¹): 3.30
Watershed area (ha): 88.0	P retention coeff.: 0.65
% watershed ponded: 0.0	Lake type: artificial

BIOLOGICAL:

30 January 1995

2 September 1994

DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 95%	CHROOCOCCUS 60%
	#2		ANABAENA 15%
	#3		
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			6.32
DOM. ZOOPLANKTON (% TOTAL)	#1	COLLOTHECA 34%	VORTICELLA 62%
	#2	KERATELLA 28%	DIFFLUGIA 15%
	#3	SYNCHAETA 24%	CALANOID COPEPOD 9%
ROTIFERS/LITER		83	50
MICROCRUSTACEA/LITER		9	71
ZOOPLANKTON ABUNDANCE (#/L)		92	563
VASCULAR PLANT ABUNDANCE			Sparse
SECCHI DISK TRANSPARENCY (m)			2.1
BOTTOM DISSOLVED OXYGEN (mg/L)		7.3	9.0
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³): None
Anoxic volume (m³): None

CHEMICAL:

Lake: JONES POND

Town: MIDDLETON

	30 January 1995		2 September 1994		
DEPTH (m)	1.0	2.0	1.0		2.0
pH (units)	6.4	6.4	6.9		7.0
A.N.C. (Alkalinity)	8.7	8.6	6.2		6.4
NITRATE NITROGEN	< 0.10	< 0.10	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.36	0.20	< 0.10		< 0.10
TOTAL PHOSPHORUS	0.008	0.008	0.028		0.018
CONDUCTIVITY (μ mhos/cm)	35.6	34.9	32.3		33.0
APPARENT COLOR (cpu)	16	17	19		18
MAGNESIUM			0.48		
CALCIUM			3.2		
SODIUM			1.8		
POTASSIUM			0.31		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	5	5	5		5
TN : TP	45	25			
CALCITE SATURATION INDEX			3.1		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1994

D.O. S.D. PLANT CHL TOTAL CLASS

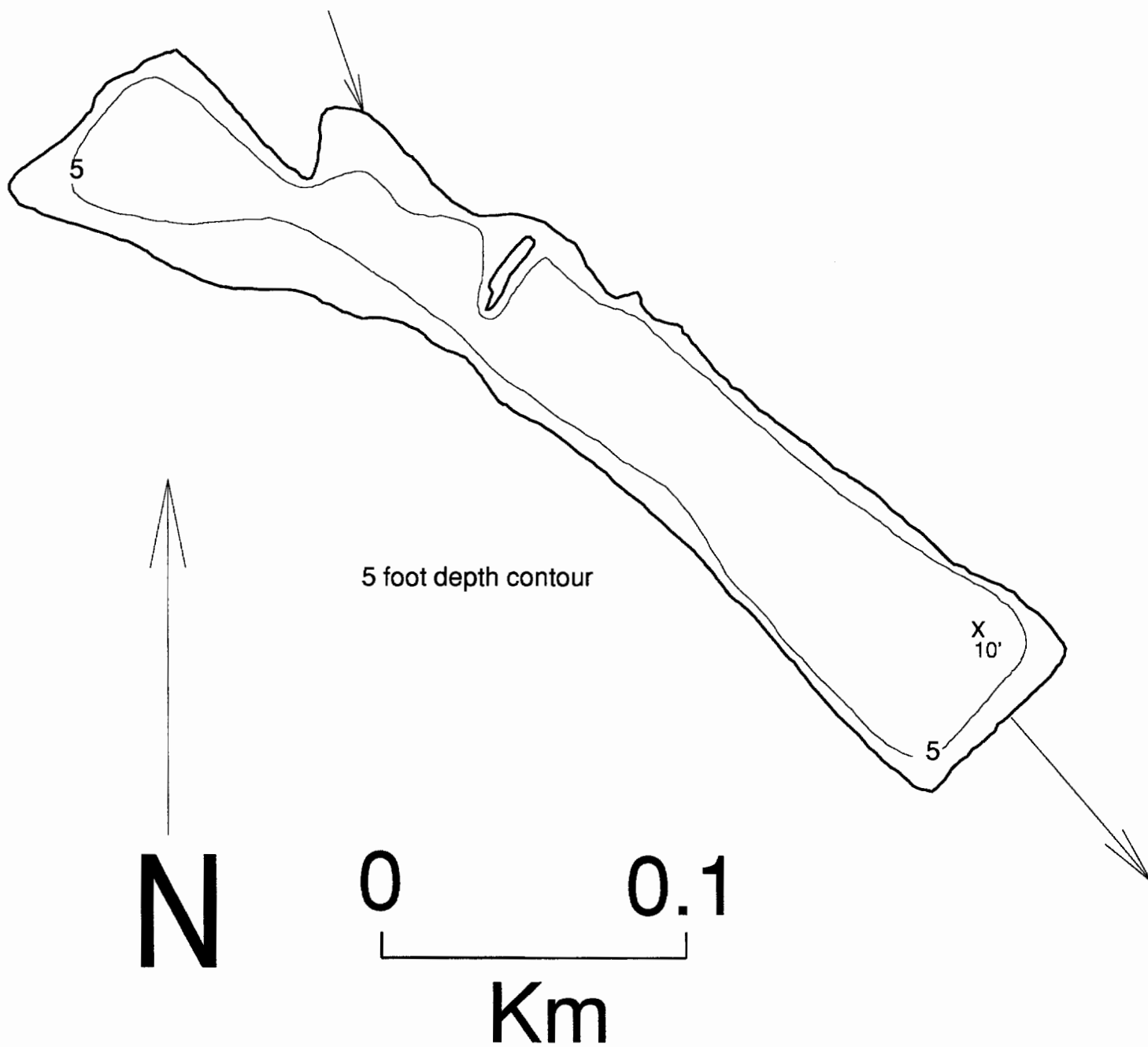
**	3	0	1	4	Oligo.
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COMMENTS:

1. AKA Pocomoonsshine Pond.
2. This is a man-made pond on Jones Brook located in the Jones Pond Wildlife Management Area that is managed by the NH Fish and Game Department. It is located on a F&G gated road; access by walk-in only. No motors are allowed and only fly fishing is permitted.
3. Water level was down about 1 1/2 feet at the September sampling.
4. Shoreline was mostly rocky with patches of sandy areas (unusual for a flooded man-made pond).
5. Although not abundant, blue-green algae dominated the net phytoplankton in the summer; protozoans dominated the zooplankton.

Jones Pond

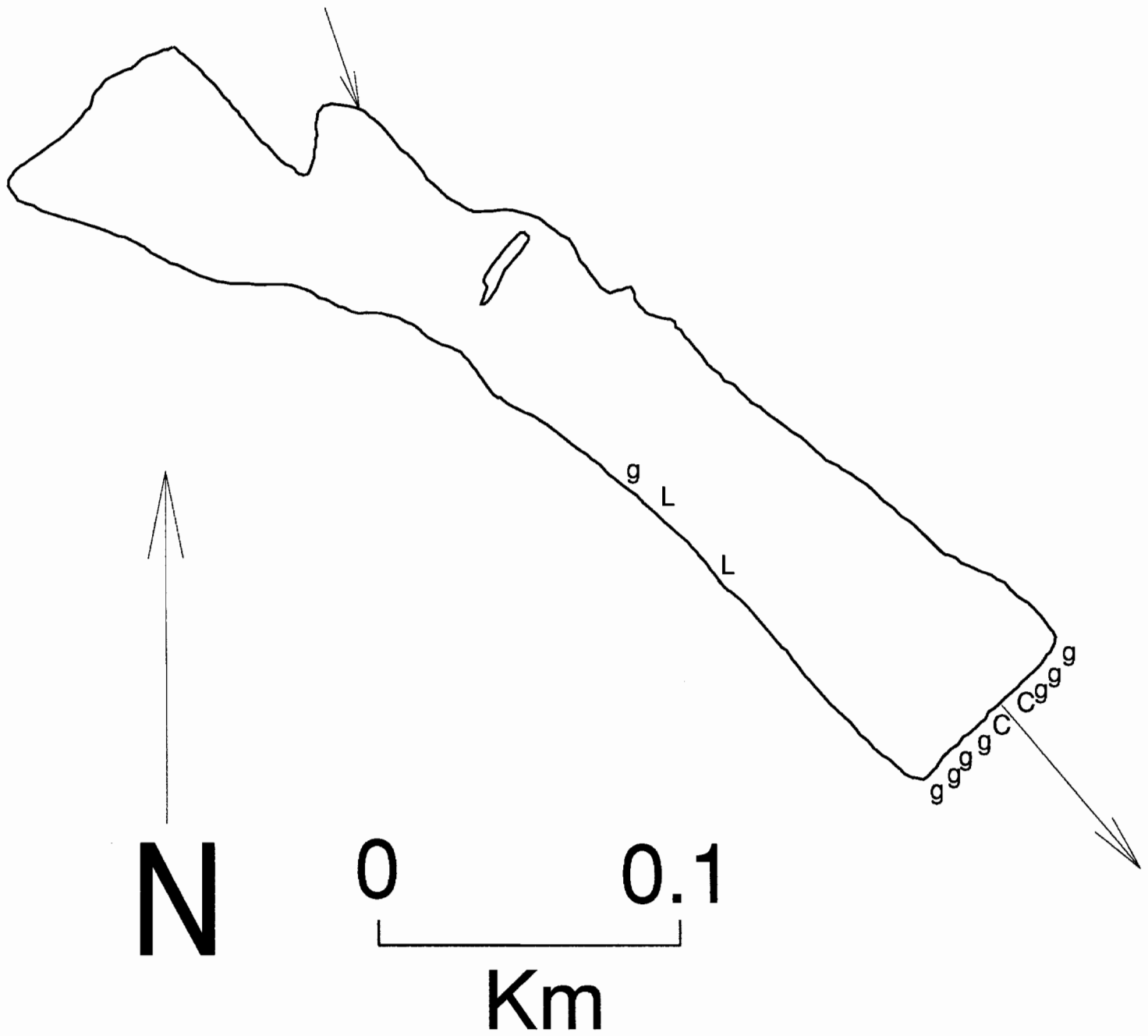
Middleton



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Jones Pond

Middleton



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